

**Department:** Statistics

**Course No:** STAT 242Q

**Title:** Analysis of Experiments

**Credits:** 3

**Contact :** Dipak K. Dey

**WQ:** Q

**Catalog Copy :** 242Q. Analysis of Experiments. Either semester. Three credits. Prerequisite: STAT 201 or 220 or consent of instructor. Credit may not be received for both STAT 242 and 342.

Straight-line regression, multiple regression, regression diagnostics, transformations, dummy variables, one-way and two-way analysis of variance, analysis of covariance, stepwise regression.

**Course Information :**

A. The objective of this course is to introduce students to statistical data analysis using the SAS software. Students will learn in-depth about topics such as linear regression, analysis of variance methods, analysis of covariance, etc.

B. There will be weekly reading assignments from the text, weekly problem sets involving data analysis, in-class midterm and an in-class final.

C. Students will obtain hands-on experience with analyzing data using statistical models, such as regression and analysis of variance methods.

**Q Criteria :** This course involves material which demands facility with algebraic and analytical skills, and computing. These skills are all integrated throughout the course.

**Role of Grad Students:** Graduate assistants offer tutoring, grade homeworks and offer software assistance in the department's Teaching Lab.